THE OCCURRENCE OF MARCASITE IN THE RARITAN FORMATION.

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The Gault formation of Folkstone near Dover, England, has long been known to produce the form of marcasite known as "spear head ore" from its apparent close resemblance to this weapon. So far as I can ascertain this form of marcasite has never been observed in this country where it occurs under similar circumstances as in England.

The beds of the Raritan formation at Sayreville, near New Brunswick in New Jersey, which are largely worked for clay and kaolin, contain a considerable amount of pyrite usually in the form of balls, and concretions, in many instances resembling coprolites. Imbeded in the plastic clays associated with these pyrite nodules were found perfect specimens of the spear head variety of marcasite, very closely resembling in size and appearance those from the foreign locality already cited. In some specimens the marcasite twins are implanted



upon pyrite; again, crystals of marcasite were studded with minute cubes of pyrite illustrating the pseudo-morphism between these dimorphous ferric sulfides.

The specimens here described were obtained upon a joint excursion of the New York and Philadelphia mineralogists to this

FIG. 1. x 2. locality under the guidance of Mr. John A. Manley of New Brunswick, who collected the first specimens.